

TEXT OF PROPOSED REGULATIONS

(Add to California Code of Regulations, Title 27, Division 2, Subdivision 1, Chapter 7)

CHAPTER 7. ONSITE WASTEWATER TREATMENT SYSTEMS

ARTICLE 1. DEFINITIONS

§22900. SWRCB – General Definitions.

Except as otherwise indicated in this Article, definitions of terms used in the SWRCB-promulgated portions of this Subdivision shall be those set forth in Division 7 (commencing with Section 13000) of the Water Code and Chapter 6.5 of Division 20 of the Health and Safety Code (commencing with Section 25100).

“**Authorized local agency (ALA)**” means a city or county government body or a responsible management agency that has formal, written authorization from a RWQCB to administer this Chapter, or a portion thereof.

“**At-grade system**” is an OWTS dispersal system that has specific design parameters located at or close to the original grade. The discharge from an at-grade system is always subsurface.

“**Basin plan**” is the same as “water quality control plan” as defined in Division 7 (commencing with Section 13000) of the Water Code. The listed beneficial uses of the State’s surface water and groundwater are designated by each RWQCB in basin plans.

“**Bedrock**” is the rock, usually solid, that underlies soil or other unconsolidated surficial material.

“**Certification**” is an expression of professional opinion through certificate, stamp, or signature that the OWTS, or its components, meets industry standards that are the subject of the certification, but does not constitute a warranty or guarantee, either express or implied. For proprietary supplemental treatment systems, certification is a statement that indicates the subject system has demonstrated performance through an independent, third-party evaluation of performance data, but still does not constitute a warranty or guarantee, either express or implied.

“**Coarse fragments**” are rock or mineral particles greater than 2.0 mm in diameter.

“**Community water supply**” is a public water system regulated by the California Department of Health Services or a local health department.

“**Conventional system**” is an OWTS consisting of a septic tank and typically a gravity subsurface dispersal system, for example a leachfield, seepage pit, or an evapotranspiration and absorption system. A conventional system may include septic tank effluent pumping where the dispersal area is located at a higher elevation than the associated septic tank, or a pressure distribution system, a mound system or an at-grade system. Properly sited, designed, installed and operated conventional systems are capable of nearly complete removal of suspended solids, biodegradable organic compounds and fecal coliforms. However, other pollutants may not be removed to acceptable levels. For example, conventional systems are expected to remove no greater than 10 to 40% of the total nitrogen in domestic wastewater.

“**Cutbank**” is a man-made excavation of the natural terrain or natural drop in elevation that is in excess of three feet vertical distance over a three-foot horizontal distance.

“**Design flow**” is the estimated daily wastewater flow expected to enter an OWTS for use in the design process.

“**Dispersal system**” is a leachfield, seepage pit, mound, at-grade, subsurface drip system, evapotranspiration and absorption system, or other types of systems for final wastewater treatment and subsurface discharge.

“**Domestic wastewater**” means the type of wastewater normally discharged from or similar to that discharged from plumbing fixtures, appliances and devices including, but not limited to toilets, bathtubs, showers, laundry facilities, dishwashing facilities, and garbage disposals. Domestic wastewater does not include industrial-process wastewater.

“**Domestic well**” means any hole or shaft excavated or drilled into the earth for the purposes of use as a water supply well and is not a community water supply.

“Effluent” is the wastewater discharged from an OWTS treatment component or any portion thereof.

“Electronic deliverable format” (EDF) is the data standard adopted by the SWRCB for submittal of groundwater quality monitoring data to the SWRCB’s internet-accessible database system.

“Evapotranspiration and absorbtion (ETA) bed” means a subsurface dispersal system that relies on soil capillarity and root uptake to disperse the effluent from a septic tank or supplemental treatment system through surface evaporation soil absorption and plant transpiration.

“Exemption” is an exception to these regulations, or a portion thereof, by the RWQCB in accordance with Article 6 of this Chapter.

“Existing OWTS” is an OWTS that was permitted by the applicable local authority before codification of this Chapter.

“Failure” is a condition of an OWTS that causes or threatens to cause impairment of beneficial uses of surface water or groundwater or threatens public health by creating a potential for direct or indirect contact between domestic wastewater or partially-treated domestic wastewater and the public. Examples of failure include:

1. Domestic wastewater backing up into a structure caused by slow soil absorption of septic tank effluent or a mechanical malfunction;
2. Domestic wastewater leaking from an OWTS to ground surface or groundwater and causing pollution or nuisance or posing an immediate health hazard;
3. Violation of water quality objectives for surface water or groundwater as established in basin plans.

“Fecal coliforms” are indicator bacteria common to the digestive systems of warm-blooded animals that are cultured in standard tests to indicate either contamination from sewage or the level of disinfection, generally measured as colonies/100 milliliters.

“Fines” are soil particles with a diameter less than 0.05 millimeters.

“Groundwater” is any subsurface body of water, including perched water. The listed beneficial uses of the State’s groundwater is designated by each regional water quality control board and listed in the appropriate basin plan.

“General minerals” means the following elements or compounds commonly found in water and wastewater: Ca, Mg, Na, K, Fe, Cu, Mn, Zn, Sulfate, Chloride, Nitrate, Fluoride, and TDS and the following characteristics of water and wastewater: Hardness, Alkalinity, MBAS, and pH.

“Gravel-less chamber” system means a buried structure used to create a stone aggregate-free absorption area for infiltration and treatment of wastewater.

“High-strength waste” is wastewater from an establishment, home, or business having an average concentration of biochemical oxygen demand (BOD) greater than 300 mg/L or total suspended solids (TSS) greater than 300 mg/L.

Imported soil material:

“Leachfield” means one or a group of chambers or trenches designed to disperse effluent from a septic tank or supplemental treatment system.

“Local agency” means any agency having authority as provided by a county or city ordinance to regulate OWTS. This may include, but is not limited to, county/city health departments, building departments, or departments of public works.

“Major repair” means OWTS enlargement or corrective work necessary to eliminate a failure condition to an OWTS where such improvements involve the replacement, or modification of a septic tank, supplemental treatment unit, or dispersal system, excluding non-perforated distribution pipes, regardless of whether or not a failure condition exists.

“Memorandum of understanding” (MOU) is a formal agreement between the RWQCB and a local agency authorizing the local agency to administer this Chapter, or a portion thereof.

“Mound system” is an aboveground soil treatment, dispersal, and absorption system following an OWTS treatment unit. Mound systems have a subsurface discharge and specific design parameters.

“Mottling” is a soil condition characterized by spots or blotches of different color or shades of color interspersed with the dominant color as described by the United States Department of Agriculture soil classification system. Mottling can be indicative of historic high groundwater level.

“New OWTS” is a proposed or constructed OWTS permitted after the effective date of this Chapter.

“Onsite wastewater treatment system(s)” (OWTS) has the same meaning as found in §13290 of the California Water Code. The short form of the term is singular or plural, as appropriate.

“Operation permit” means a written document issued by the PA authorizing the permittee to operate and/or monitor an OWTS with supplemental treatment component. In local jurisdictions where the RWQCB is the PA, an operation permit shall be waste discharge requirements issued by the RWQCB and a construction permit for the OWTS must be separately obtained from the local agency.

“Percolation test” is a method of testing absorption properties of the soil (see §22955(c) for reference example).

“Permit” is the written document issued by the permitting authority authorizing the permittee to install and/or operate an OWTS. “Permit” means any one of the following:

1. A waste discharge requirement (WDR) or conditional waiver issued by the RWQCB; or
2. An operation permit issued by the ALA; or
3. A permit to construct issued by the ALA.

“Permitting authority” (PA) is a RWQCB unless a local agency has been authorized as an ALA by a RWQCB to administer this Chapter, in which case the ALA becomes the PA.

“Person” is any individual, firm, association, organization, partnership, business trust, corporation, company, or unit of local government.

“Pretreatment” is preliminary wastewater treatment occurring prior to discharge into any component of an OWTS. Pretreatment may include, but is not limited to, oil and grease removal, BOD and TSS reduction, screening, and/or detoxification. When pretreatment is used in the OWTS process, it is considered leachfield, seepage pit, mound, at-grade, subsurface drip system, or an evapotranspiration and absorption system as part of the overall OWTS.

“Public health hazard” is a condition whereby sufficient types and amounts of biological, chemical, or physical (including radiological) agents are present and likely to cause human illness, disorders, or disability. These agents include, but are not limited to, pathogenic viruses, bacteria, parasites, toxic chemicals, and radioactive isotopes.

“Qualified professional” is an individual who, by virtue of education, training, and experience, is qualified to perform soil and/or site evaluations and the design of OWTS. A qualified professional is capable of determining site-specific soil properties, geologic factors, and hydrologic conditions.

“Qualified service provider” is a qualified professional or an individual with knowledge and competency in OWTS operation, maintenance, and monitoring through experience and/or education.

“Record Plan” is the document submitted to the permitting authority providing “as-built” construction details of the OWTS, including but not limited to final placement of system components, sizes and specification of components.

“Responsible management entity” (RME) is a special district or private entity that manages the operation, monitoring, maintenance, repair, or oversight of individual or multiple OWTS. In some cases, an RME can also be an ALA.

“Rock” is any naturally formed aggregate of one or more minerals (e.g., granite, shale, marble); or a body of undifferentiated mineral matter (e.g. obsidian), or of solid organic matter (e.g., coal).

“Sand” is a soil separate and a type of soil texture. As a soil separate, sand is the individual rock or mineral fragments in soils having diameters ranging from 0.05 to 2.0 millimeters in diameter. As a soil texture, sand is the soil material that is comprised as 85 percent of more sand particles and not more than 10 percent silt and clay particles.

“Scum” is the layer of floating solids on the wastewater surface in a septic tank.

“Seepage pit” is typically a drilled or dug hole, 3 to 6 feet in diameter and 10 to 100 feet deep, constructed to allow disposal of effluent from a septic tank or other OWTS treatment unit.

“Septic tank” is a watertight, covered receptacle designed for primary treatment of sewage and constructed to:

1. Receive wastewater discharged from a building;
2. Separate settleable and floating solids from the liquid;
3. Digest organic matter by anaerobic bacterial action;
4. Store digested solids; and
5. Clarify wastewater for further treatment with final subsurface discharge.

“Septic tank effluent” is wastewater discharged from a septic tank.

“Setback” is a minimum horizontal distance maintained between an OWTS feature and a potential point of impact or other physical point of reference.

“Site” is the location of the OWTS and, as deemed appropriate by the PA, a reserve area capable of disposing 100% of the design flow from all sources it is intended to serve.

“Slope” is the rate of fall or drop measured as percent of grade.

“Soil” is the naturally occurring body of porous mineral and organic materials on the land surface, and is composed of unconsolidated materials above bedrock. Soil is composed of sand-sized, silt-sized, and clay-sized particles mixed with varying amounts of larger fragments and organic material. The various combinations of particles differentiate specific soil textures identified in the USDA Soil Classification Chart. For the purposes of this Chapter, soil shall contain earthen material having more than 50 % of its volume composed of particles smaller than 0.08 inches (2 mm) in size.

“Soil horizon” is a roughly defined horizontal zone, generally defined as A, B, E, O, or C, developed by natural soil-forming processes within a soil profile and differing from vertically adjacent soil horizons within the same soil profile in such characteristics as color, structure, texture, consistence, and pH.

“Soil permeability” is the capacity of the soil to transmit liquids.

“Soil structure” is the arrangement of primary soil particles into aggregate particles or clusters that are separated by natural planes of weakness from adjoining compound particles or clusters.

“Soil texture” is determined by the relative amounts of fine earth fraction (sand, silt, and clay) as defined by the classes of the soil textural triangle developed by the United States Department of Agriculture and listed in Table 1a. A specific soil’s classification may be modified when coarse fragments (greater than 2 millimeters) are present in sufficient number (i.e., gravelly sandy loam, cobbly clay) or when the soil is deemed compacted, as indicated by a bulk density test.

“Subsurface drip dispersal system” is a form of subsurface effluent dispersal using shallow distribution in combination with low-pressure drip emitters.

“Supplemental treatment” is any OWTS or component of an OWTS, except a septic tank or dosing tank, that performs additional wastewater treatment prior to discharge of effluent into the dispersal field. Supplemental treatment may be required where the site is not suitable for a conventional system. Supplemental treatment systems must meet the performance requirements of §22912.

“Total coliforms” is a group of bacteria consisting of several genera belonging to the family Enterobacteriaceae. The historical definition of this group has been based on the method used for detection (lactose fermentation) rather than on the tenets of systematic bacteriology.

“Variance” is a mitigated allowance by the PA for a site-specific exclusion from a requirement contained in this Chapter.

“Weathered bedrock” is rock that has been exposed to the atmosphere at or near the earth’s surface and changed in color, texture, composition, firmness, and/or form as a result of the exposure with little or no transport of loosened or altered material. For purposes of this Chapter, weathered bedrock is not soil.

Authority Cited: CA Water Code § 13291. Reference: CA Water Code § 13291(b).

ARTICLE 2. GENERAL PROVISIONS

§22901. SWRCB -- Applicability and General Requirements.

(a) This Chapter applies to all new and existing OWTS.

(b) No person shall construct, relocate, expand, repair or replace, any OWTS or increase the pollutant concentration or quantity of the waste stream entering an OWTS without first filing an application for and obtaining a permit from the PA, unless said permits are not required by the PA.

(c) All OWTS shall comply with permit requirements issued by the PA

(d) Property owners subject to §22901(b) or the owner’s authorized representative shall file an application (signed by the property owner) for a permit. All applications shall include a site evaluation report prepared by a qualified professional in

compliance §22955 contain in this Chapter. The site evaluation report and the OWTS design shall be submitted to the PA as part of a complete application for construction/operation.

(e) The PA shall deny any permit for a new OWTS or OWTS expansion that is not in compliance with the requirements of this Chapter.

(f) OWTS with supplemental treatment units installed after the effective date of this Chapter shall be issued operation permits. In the case of the sale of real property containing a unit subject to a operation permit, the seller shall, by delivery of a signed copy of the permit, relinquish his or her authority pursuant to the permit to the buyer. On or before the renewal date for the permit, the new permit holder shall notify the PA of the change of ownership.

(g) No portion or component of a new OWTS or OWTS subject to major repair shall be covered or buried without inspection or authorization by the PA.

(h) RWQCBs and the local agency can establish policies and regulations that are more protective of water quality than the requirements contained in this Chapter.

Authority Cited: CA Water Code § 13260, 13264, 13267, 13291. Reference: CA Water Code § 13260(c), 13264(a)(2), 13267(a), 13267(b)(1), 13267(c), §13291(a), 13291(b)(1)

§22902. SWRCB – OWTS Enforcement.

(a) All new OWTS and OWTS subject to major repair shall be operated and maintained in compliance with all permit requirements, if any, as issued by the PA and as provided in the applicable O&M manual.

(b) The PA may take enforcement action against an OWTS owner or operator for failure to comply with applicable monitoring or O&M requirements.

(c) The permit holder shall comply with all enforcement actions within the timeframe established by the PA.

(d) Upon revocation of a permit or enforcement action to cease discharge, the discharge from the source shall cease until the PA issues a new permit. The PA shall not issue a new permit, enforcement action or suspension until the OWTS is modified to achieve compliance.

(e) When a person violates the provisions in this Chapter, the PA may take the resulting enforcement actions, or any other proceeding authorized by law, including, but not limited to, any one or a combination of the following:

- (1) orders requiring corrective measures necessary to comply with this Chapter;
- (2) administrative penalties;
- (3) citations;
- (4) denial, suspension, modification, or revocation of permits; or
- (5) orders to stop work and/or refrain from using the OWTS or portion of the OWTS.

Authority Cited: CA Water Code § 13260, 13264, 13267, 13291. Reference: CA Water Code § 13260(c), 13264(a)(2), 13267(a), 13267(b)(1), 13267(c), §13291(a), 13291(b)(1)

§22903. SWRCB -- Major Repairs.

(a) For existing OWTS that are failing or subject to major repair (as that term is defined in §22900), the PA shall take timely action to inform property owners of any non-compliance and shall direct corrective action to be accomplished within a specified time. The PA may require supplemental treatment where water quality objectives are violated due to the discharge of the OWTS. If, after consultation with the PA (if not the RWQCB), a RWQCB determines that the corrective action required by the PA is inadequate, the RWQCB shall take additional and necessary corrective action to repair the OWTS.

(b) In the course of a major repair, the PA may evaluate the entire OWTS. The PA may accept information from a qualified professional or qualified service provider about the performance and functioning of the OWTS, or any repairs deemed necessary as all or part of its evaluation.

(c) For OWTS constructed in compliance with the standards in this Chapter that are failing or subject to major repair, the PA shall take timely action to bring such OWTS into compliance with this Chapter. The PA shall inform the property owners of any required corrective action within a specified time. The PA may require supplemental treatment where water quality objectives are violated due to the discharge of the OWTS. If, after consultation with the PA (if not the RWQCB), a RWQCB determines that the corrective action undertaken by the PA is inadequate, the RWQCB shall take additional and necessary corrective action to solve the problem.

Authority Cited: CA Water Code §13291(b)(4). **Reference:** CA Water Code §13291(b)(4).

ARTICLE 3. OWTS REGULATORY OVERSIGHT

§22905. SWRCB -- Responsible Agencies.

The SWRCB and RWQCBs are the governmental bodies responsible for administering this Chapter. An ALA may also administer this Chapter pursuant to formal authorization from a RWQCB.

Authority Cited: CA Water Code §13291(e), §13240, §13225. **Reference:** CA Water Code §13291(e), §13240, §13225.

§22906. SWRCB -- SWRCB Functions and Duties.

(a) The SWRCB shall update the regulations and oversee statewide implementation of this Chapter.

(b) The SWRCB shall provide prospective ALAs with a draft application for local agency authorization to implement this Chapter within 30 calendar days of the effective date of this Chapter.

Authority Cited: CA Water Code §13291. **Reference:** CA Water Code §13291.

§22907. SWRCB -- RWQCB Functions and Duties.

The RWQCBs shall administer this Chapter through waste discharge requirements (WDRs) or conditional waivers of WDRs unless a local agency is authorized by a RWQCB to administer this Chapter, or a portion thereof. Prior to authorization for local agency implementation, a RWQCB shall review the local agency application for authorization to implement this Chapter and, if satisfactory, shall make a finding that the local agency is capable of implementing the requirements of this Chapter. A RWQCB shall authorize an ALA through an adopted resolution or an MOU.

(a) Each RWQCB shall incorporate the requirements of this Chapter by reference into the appropriate basin plan. A RWQCB may impose more protective requirements, as needed to protect water quality or human health.

(b) The RWQCB shall authorize a local agency to administer this Chapter or a portion thereof within 120 days after the application filing date unless the RWQCB makes at least one of the following determinations in writing to the ALA within 60 days of receipt of application:

(1) the RWQCB elects to retain administration of this Chapter;

(2) the RWQCB finds that the local agency's application is incomplete; in which case the local agency must resubmit the application before the RWQCB may approve it. In such cases, the 60 days specified in ¶(b) and the 120 day period for Board consideration begins anew after receipt of the corrected application; or

(3) the RWQCB finds that the local agency does not meet the qualification requirements listed in §22908 to administer this Chapter, or a portion thereof;

(c) The RWQCB shall review ALA implementation of this Chapter at least every five years.

(d) The RWQCB shall provide a minimum of 90 calendar days written notice to the ALA in cases when the RWQCB proposes termination of ALA authorization to administer this Chapter.

Authority Cited: CA Water Code §13269, 13291

§22908. SWRCB -- Authorized Local Agency Functions and Duties.

(a) An ALA shall administer this Chapter, or a portion thereof, as authorized by a RWQCB.

(b) An ALA shall provide a minimum of 90 calendar days written notice to the RWQCB prior to the termination of ALA administration of this Chapter.

(c) Where an ALA's jurisdiction is included in more than one Region, RWQCBs and the ALA shall attempt to establish one common authority to administer this Chapter.

(d) The ALA shall provide the following assurances or information in seeking authorization from a RWQCB to administer this Chapter:

(1) assurance that the permitting of all new OWTS meets or exceeds the requirements contained in this Chapter.

(2) a detailed description of the process for administering this Chapter.

(3) a commitment to annually submit electronically to the RWQCB a report summarizing the year's activity. The report shall address and/or contain, as a minimum, the following information:

(A) a listing of all new OWTS, including locations (e.g., street address);

(B) a listing of all repair permits issued, including locations (e.g., street address) with a summary of repair actions;

(C) all variances issued, including the nature and rationale of the variance, including locations (e.g., street address); and

(D) the number of water quality problems discovered, as the result of the ALA's program, including:

1. total number of investigations;

2. number of samples taken (including sample sites and date), and sample results;

3. date of inspection;

4. location (e.g., street address);

5. actions taken to address problems with failing OWTS, particularly failing OWTS adjacent to 303(d) listed waters;

6. any changes in local ordinances affecting how OWTS are regulated; and

7. other information available to the ALA that can be used by the RWQCB to assess the adequacy of the local program (e.g., septic tank pumping or monitoring records, resolved and unresolved complaints)

(4.) The ALA shall have qualifications and knowledge in all the following areas:

(A) permitting and inspection of OWTS;

(B) state policies and requirements and basin plans;

(C) soil and site evaluation;

(D) OWTS design, installation, performance, and monitoring; and

(E) design and operation of supplemental treatment systems, if the ALA permits such systems.

(5.) The ALA shall identify the criteria and the process to be used by the ALA for granting a variance from any individual requirement under Article 6 of this Chapter, consistent with RWQCB exemption criteria established pursuant to §22947;

(6.) The ALA shall maintain all site information as required under §22955;

(7.) The ALA shall investigate complaints regarding inadequate and/or failing systems;

(8.) The ALA shall have enforcement procedures necessary to obtain compliance with the requirements of this Chapter and permit conditions.

Authority Cited: CA Water Code § 13267(a), 13267(b)(1), 13291, 13291(b)(3)

ARTICLE 4 PERFORMANCE AND MONITORING

§22910. SWRCB -- General Standards.

(a) New OWTS and OWTS subject to major repair shall be operated to accept and treat flows of domestic wastewater excluding any material not generally associated with toilet flushing, food preparation, laundry and personal hygiene. Additionally, OWTS may be designed and operated to accept:

(1) wastewater from commercial establishments, facilities, and systems that exclude hazardous waste, as defined in Title 22 of the California Code of Regulations;

(2) wastewater from nonresidential facilities after use of pretreatment systems to reduce wastewater strength below high strength waste levels; and/or

(3) wastewater from nonresidential facilities that use waste segregation practices and systems to reduce pollutants entering the OWTS.

(b) New OWTS shall be operated and maintained to remove the following pollutants: biochemical oxygen demand, total suspended solids, fecal indicators, phosphorus, metals, and some synthetic organic compounds (SOC).

(c) All OWTS shall meet the following performance requirements:

(1) no discharge to the land surface from an OWTS shall result;

(2) the dispersal site shall not attract or be a source of vectors; and

(3) no odors constituting a nuisance shall result from any component of the OWTS.

(d) All new OWTS or OWTS subject to major repair shall be designed based on the expected influent wastewater quality and quantity and characteristics of the site and soils.

(e) Effluent discharged to the dispersal field shall not exceed the levels designated as high strength wastewater.

(f) New OWTS or OWTS subject to major repair shall be designed to prevent solids in excess of one-eighth (1/8) inch in diameter from passing to the dispersal system while under two feet of hydrostatic head. Septic tanks that use a National Sanitation Foundation/American National Standard Institute (NSF/ANSI) Standard 46 certified septic tank septic tank filter at the final point of effluent discharge from the OWTS and prior to the dispersal system shall be deemed to meet this requirement.

(g) New OWTS and OWTS subject to major repair shall be designed to disperse effluent to subsurface soils in a manner that provides unsaturated zone treatment and aerobic decomposition of the effluent.

(h) Wastes from holding tanks, recreational vehicles, and portable toilets that contain materials deleterious and inhibiting to OWTS operation shall not be discharged to OWTS.

(i) A qualified professional shall perform evaluations for all new OWTS and OWTS subject to major repair, including a site investigation.

(j) A qualified professional shall design all new and repaired supplemental OWTS before a permit is issued to ensure compliance with the site suitability criteria identified in this Chapter.

(k) The owner or authorized representative shall provide appropriate notification of a site investigation as prescribed by the PA.

(l) A qualified professional shall design all new and repaired conventional OWTS.

(m) A Licensed General Engineering Contractor (Class A) or Sanitation System Contractor (Specialty Class C-42) shall construct all new OWTS in accordance with California Business and Professions Code Section 7056 and Section 83242, Article 3, Division 8, Title 16 of the California Code of Regulations. An owner-builder may construct a conventional system.

(n) A qualified professional shall inspect all new OWTS installations and installations for OWTS subject to major repair and shall prepare a Record Plan. The qualified professional shall certify in writing that the installation meets the design approved by the PA. The PA shall not issue the final approval until this certification is received.

(o) The owner or owner's authorized representative shall retain Record Plans and an Operation and Maintenance Manual of the OWTS upon completion of construction and shall submit Record Plans to the PA.

(p) The PA may conduct periodic inspections of any OWTS permitted under this Chapter. Such inspections shall include the overall OWTS conditions, mechanics, operational function, and dispersal system condition and operation.

(q) The PA may evaluate the treatment performance of any OWTS permitted under this Chapter by visual assessment or an assessment of water quality data from laboratory analysis of OWTS effluent or groundwater and/or surface water as appropriate.

(r) All new OWTS or OWTS repaired as a result of a failure condition shall have an O&M manual prepared by a qualified professional. O&M manuals shall include, but not be limited to:

- (1) name, address, telephone number, business and professional license of the OWTS designer;
- (2) name, address, telephone number, business and professional license of the OWTS installer;
- (3) name, address, telephone number of an emergency contact person;
- (4) instructions for proper use of the OWTS;

(5) Record Plan, together with a certification, for a conventional or pressure distribution style OWTS, that the system meets all applicable requirements under §22914(a);

- (6) design flow and performance requirements for the OWTS;
- (7) narrative description of the OWTS that includes: major components and their functions and design capacity;
- (8) monitoring requirements to assess system performance;
- (9) maintenance requirements, including suggested maintenance frequency;
- (10) a list of substances that would impair performance if discarded into the OWTS; and
- (11) where appropriate, O&M manuals shall include the following additional information:

(A) a parts identification and inventory list for supplemental treatment components;

(B) a trouble-shooting guide;

(C) a complete electrical wiring diagram that identifies components, and wire gage and color for supplemental treatment components and OWTS with pumps;

(D) a list of safety precautions directly related to the OWTS; and

(E) an emergency response procedure for system malfunctions (e.g., in response to an alarm indicating a system malfunction).

(s) All owners of a septic tank shall have a qualified service provider inspect the septic tank upon change of property ownership to ensure that the level of settleable solids and/or scum does not impair the performance of the septic tank. The owner shall maintain a record of inspections and maintenance. Where a septic tank has a filter to meet §22910(f), the Qualified Service Provider shall inspect the filter to ensure proper performance.

(t) When a septic tank is pumped, the owner shall have the system visually checked for malfunctions (e.g. broken baffles, leaking or broken inlet, outlet or sanitary tees, etc.).

(u) Owners with an onsite domestic well on their properties or with domestic wells adjacent to their properties must monitor groundwater in the vicinity of the OWTS discharge upon installation of a new OWTS or transfer of property ownership. The PA may require monitoring of groundwater prior to transfer of property ownership where the PA has reason to believe a problem exists. Monitoring groundwater can be conducted by sampling and analyzing water from a well down-gradient from the OWTS. Alternatively, monitoring groundwater can be conducted by sampling and analyzing water from an onsite domestic well. This requirement is waived if an onsite domestic well does not exist, and property owners deny access to adjacent domestic wells. Groundwater analyses shall be conducted in accordance with ¶(v). Owners of new OWTS shall have onsite groundwater sampled within 30 days of installation. Unless otherwise required by the PA, existing OWTS installations shall be exempt from this requirement if any of the following apply:

- (1.) the facility that the OWTS serves is provided water from a community water supply system;

(2.) a study has been conducted by or approved by the PA, with the concurrence of the RWQCB. The study shall include an analysis of existing and relevant groundwater and surface water data that indicates no violation of water quality objectives due to the OWTS discharge is reasonably anticipated over the life of the OWTS;

(v) A laboratory certified by the Department of Health Services shall analyze domestic well water samples collected pursuant to ¶(u). The laboratory shall be capable of producing laboratory results in EDF format. The water samples shall be analyzed for general minerals and total coliforms. If a sample tests positive for total coliforms, the sample shall be analyzed for fecal coliforms. The name of the site owner, the site address and the laboratory results shall be transmitted to the SWRCB in EDF format. The PA shall have access to the laboratory results through the SWRCB's internet-accessible database. The names and addresses of owners of tested domestic wells will not be released to the general public pursuant to Section 1798.3 of the California Civil Code.

(w) The required performance evaluations, including maintenance of the OWTS, as specified by the O&M manual or permit shall be performed by a qualified service provider.

(x) All new or repaired OWTS dispersal systems shall be designed using the design flow estimates prescribed by the PA.

(v.) Where the percolation test rate is less than five minutes per inch and there is less than five feet separation to seasonal high groundwater as determined in Section 22955(d), the effluent from new OWTS shall use supplemental treatment systems that treat and disinfect OWTS wastewater to level prescribed in §22912(b) and §22912(c) prior to discharge to the dispersal field.

Authority Cited: CA Water Code §13260, 13264, 13267, 13269, 13291

§22911. SWRCB -- Septic Tank Specifications

(a) All newly installed septic tanks and grease interceptor tanks shall meet the following requirements:

(1) septic tanks shall produce a clarified effluent and provide adequate space for sludge and scum accumulations;

(2) all tanks shall be watertight, properly vented and constructed of solid, durable materials meeting the current standards of the industry. The following materials shall not be used to construct any tank:

(A.) wood products;

(B.) concrete block; or

(C.) steel, not including steel used for reinforced concrete;

(3) all tanks shall be placed on a solid or compacted level surface;

(4) septic tanks shall have at least two compartments, separated by a wall or baffle and with the inlet compartment consisting of not less than 67% of the total required capacity of the tank. Two appropriately sized single-compartment tanks in series may be used to meet this requirement;

(5) septic tanks shall have at least two access openings using risers that allow access to the tank interior meeting the following requirements:

(A.) each compartment shall have an access opening;

(B.) access openings shall be at least 20 inches in diameter;

(C.) access openings shall be secured (locked or equivalent) to prevent unauthorized access; and

(D.) access openings shall have watertight risers and shall be set at or near finished grade.

(6) prefabricated septic tanks shall be approved by the International Association of Plumbing and Mechanical Officials (IAPMO) and installed according to the manufacturer's instructions. If IAPMO certified tanks are not available locally, other prefabricated tanks may be approved by the PA and shall comply with subsection (a)(7) below;

(7) non- prefabricated tanks or prefabricated tanks not certified by IAPMO shall be constructed only after the design is stamped and certified by a California registered civil engineer as meeting the general industry standards necessary to comply with these requirements;

(8) the tanks shall be structurally designed to withstand all anticipated earth or other loads; and

(9) upon completion of installation, tanks shall be tested in place and certified watertight by the system installer.

(b) New and replaced septic tanks shall be designed to prevent solids in excess of one-eighth (1/8) inch in diameter from passing to the dispersal system while under two feet of hydrostatic head. Septic tanks that use a National Sanitation Foundation/American National Standard Institute (NSF/ANSI) Standard 46 certified septic tank septic tank filter at the final point of effluent discharge from the OWTS and prior to the dispersal system shall be deemed to meet this requirement.

Authority Cited: CA Water Code § 13291

Reference: CA Water Code § 13291(b)(1)

§22912. SWRCB -- Requirements for Supplemental Treatment Components

(a) The dispersal systems of all new OWTS with supplemental treatment components shall be designed to ensure at least two feet of unsaturated soil below the bottom of the dispersal system and above either the seasonal high groundwater level, impermeable strata or fractured/weathered bedrock at all times.

(b) For purposes of complying with this Chapter, all supplemental treatment component effluent shall comply at the point of discharge to the dispersal field with the following BOD and TSS effluent limitations and, where nitrogen is a water quality concern as identified by the PA, the following nitrogen effluent limitation:

(1) The 30-day average of the samples for determining the BOD concentration shall not exceed 30 milligrams per liter (mg/L), or alternately, a Carbonaceous BOD (CBOD) in excess of 25 mg/L;

(2) The 30-day average of the samples for determining the average TSS concentration shall not exceed 30 mg/L;

(3) the 30-day average of the samples for determining the total nitrogen concentration shall not exceed 10 mg/L as nitrogen.

(c) Where supplemental treatment components of a new OWTS are designed to remove pathogens, the effluent from the OWTS shall be disinfected to achieve an effluent 30-day median fecal coliform bacteria concentration of not greater than 200 MPN per 100 milliliters prior to discharge into the dispersal field.

(d) Before installation, all non-proprietary supplemental treatment components of an OWTS shall be certified by a qualified professional and approved by the PA.

(e) Before the installation of any proprietary supplemental treatment OWTS, all such treatment components shall be certified by an independent third party testing laboratory as being capable of reliably meeting the performance requirements in ¶(c) or ¶(d), as applicable. All certification information shall have supporting documentation, including the type of maintenance required to operate the OWTS in compliance with the performance requirements. Any modification to the component tested will result in the need for re-certification. The parameters required for certification shall include the following operational testing and evaluation of the supplemental treatment component:

(1) a testing duration of not less than 6 continuous months.

(2) the wastewater used for testing shall consist primarily of municipal or domestic wastewater and shall have concentrations in the following ranges:

(A) BOD: 125 to 300 milligrams per liter;

(B) TSS: 125 to 300 milligrams per liter;

(C) total nitrogen (as N): 20 to 75 milligrams per liter; and

(D) total coliforms: 1×10^6 to 1×10^8 MPN/100 ml.

(3) Hydraulic and organic design loading shall be varied during the test to simulate OWTS operational stress at different levels of use, including:

(A) regular daily use;

(B) work week use;

(C) weekend use; and

(D) vacation (e.g., one week rest).

(4) testing of supplemental treatment components to comply with the performance requirements of ¶(c) shall be conducted based on effluent analyses of BOD, TSS and TN with the following minimum detection limits:

Parameter	Detection Limit
BOD	2 mg/L
TSS	5 mg/L
Total Nitrogen	1 mg/L

(5) testing of supplemental treatment components to comply with the performance requirements of ¶(d) shall be conducted based on effluent analyses of fecal coliforms with minimum detection limit of 2.2 MPN.

(f) The effluent from a supplemental treatment component shall be evaluated quarterly, or more frequently as required by the PA or the O&M manual, based on an analysis of a representative sample from a point after the supplemental treatment component. Effluent samples shall be analyzed by a California Department of Health Services certified laboratory using the reporting limits specified in ¶(f)(4). Testing of supplemental treatment components that perform chemical/physical disinfection treatment shall be evaluated based on analysis of fecal coliforms with a minimum detection limit of 2.2 MPN

(g) If the results from an evaluation of the effluent from a supplemental treatment component exceed the 30-day limits specified in either ¶(c) or ¶(d) by 100 percent, the results shall be immediately reported to the PA and modifications to the OWTS or OWTS process shall be made within 60 calendar days of the date of evaluation to bring the OWTS into compliance with this Chapter.

(i) The following management requirements shall be implemented for all OWTS with supplemental treatment components:

(1) The PA shall issue an operation permit requiring the permit holder to maintain a contract with a qualified service provider for operation, maintenance and monitoring of the OWTS.

(2) The operation permit may be issued to a responsible management entity (RME) that performs all O&M functions for a privately owned OWTS. In such cases, the owner of the OWTS shall be listed on the permit as a responsible entity in addition to the RME.

Authority Cited: CWC 13267, 13291. Reference: CA Water Code §13260, 13264, 13267, 13269, 13291..

§22914. SWRCB -- Dispersal Systems

(a) The qualified professional shall exercise all feasible design options to assure that the base of the dispersal system lies at the shallowest practicable depth at or below the original elevation of the soil surface to maximize elements critical to effective treatment of effluent in the soil (e.g. oxygen transfer, biological treatment, and vegetative uptake of nutrients). The qualified professional shall assure that the system meets all applicable requirements for this new section in the design.

(b) All dispersal systems, except for seepage pits as provided in §22914(l), shall be designed using bottom area of the dispersal system only as the infiltrative surface. The infiltrative surface shall be sized using the design application rates contained in either Table 1a or Figure 1.

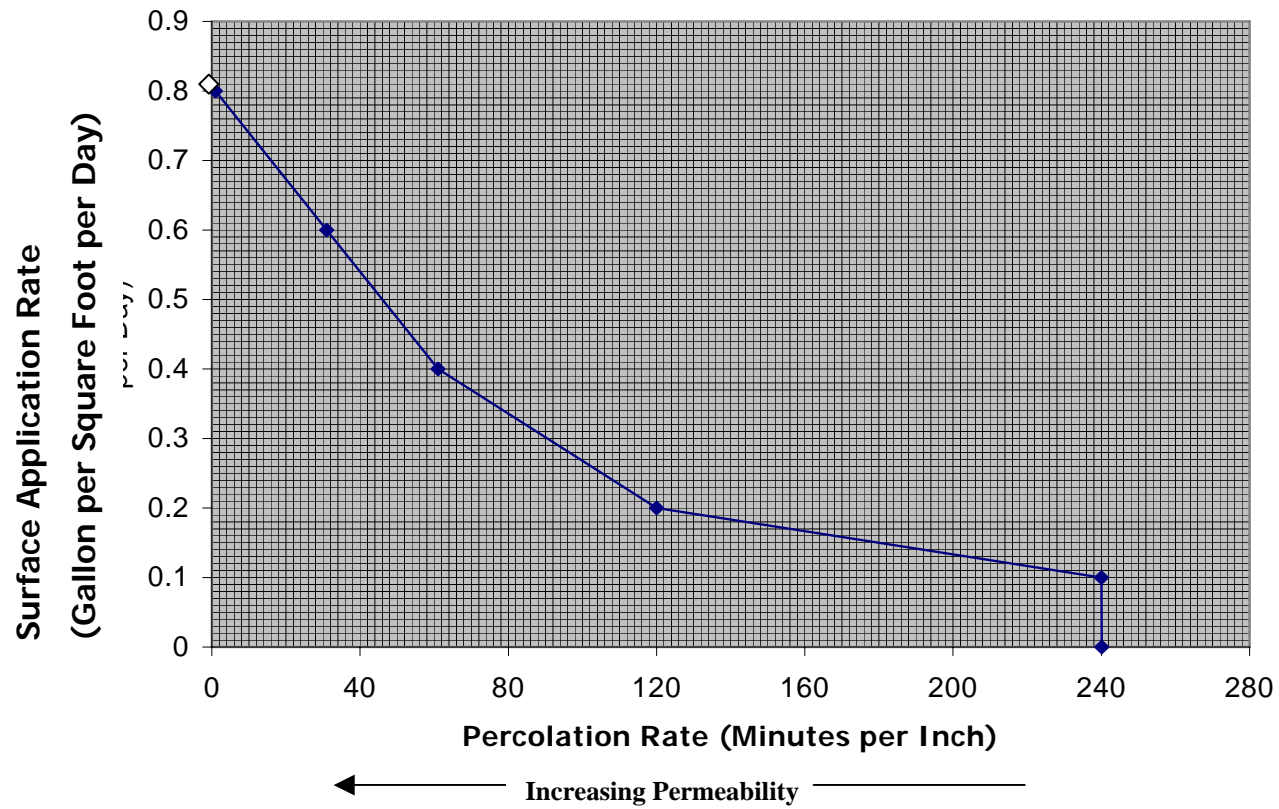
Figure 1: Design Infiltrative Surface Application Rates

Table 1: Design Infiltrative Surface Application Rates			
USDA Soil Texture Classification	Structure	Grade	Maximum Wastewater Application Rate (gallons per day per square foot)
Gravel, Gravelly Coarse Sand, Coarse Sand	Single grain	Structureless	Prohibited
Sand, Loamy Coarse Sand, or Loamy Sand ¹	Single grain	Structureless	0.8
Loamy Fine Sand or Loamy Very Fine Sand ¹	Single grain	Structureless	0.4
Coarse Sand Loam or Sandy Loam	Massive	Structureless	0.2
	Platy	Weak	0.2
		Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Fine Sandy Loam or Very Fine Sandy Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Loam	Massive	Structureless	0.2
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Silt Loam	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.4
		Moderate, Strong	0.6
Sandy Clay Loam, Clay Loam, or Silty Clay Loam ¹	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	0.2
		Moderate, Strong	0.4
Sandy Clay, Clay, or Silty Clay ¹	Massive	Structureless	Prohibited
	Platy	Weak, Moderate, Strong	Prohibited
	Prismatic, Blocky, Granular	Weak	Prohibited
		Moderate, Strong	0.2

¹This soil type shall be subject to a percolation test in addition to using soil texture determination methodology. The lesser of the two application rates in either Figure 1 or Table 1 shall be used for design.

(c) Dispersal systems shall be sited in soils that are suitable for new and repaired OWTS operation. Where soils consist of greater than 10 % rock fragments (cobbles, stones and gravel), the dispersal system area shall be increased in proportion to the percent of rock fragments to compensate for the lost treatment volume, as approved by the PA.

(d) Where the site consists of sandy or loamy sand soils or where the percolation rate measurement is less than five minutes per inch, the amount of soil beneath a dispersal system and above the seasonal high groundwater level as required in this Section shall be increased in accordance to the requirements specified by the PA.

(e) Unless prescribed otherwise by the PA, new conventional OWTS dispersal systems shall have at least five feet of continuous soil below the bottom of the dispersal system and above the seasonal high groundwater level or fractured/weathered bedrock at all times. The PA and RWQCB may allow less than five feet but not less than three feet of continuous soil if a qualified professional demonstrates that water quality in the immediate vicinity of the OWTS will not be impaired due to pathogens as a result of the OWTS discharge, as approved by the PA. In addition, conventional new OWTS dispersal systems shall comply with the following:

(1.) Pump systems used to move effluent from the septic tank to the dispersal system shall be equipped with alarms that notify the owner in the event of pump failure. All pump systems shall, at a minimum, provide for storage during a 24-hour power outage or pump failure and shall not allow an emergency overflow discharge.

(2) Rock and gravel used for disposal trenches and beds that are easily decomposed are prohibited. All drain rock and gravel used for OWTS dispersal system construction shall be washed to remove fines. Any drain rock or gravel that is greater than 5% fines (passing through a No. 200 sieve) or, as otherwise determined by the ALA to contain excessive amounts of fine particles is prohibited.

(3) All smeared or compacted soil surfaces in the sidewalls or bottom of leach line excavation shall be scarified to the depth of smearing or compaction and the loose material removed prior to placement of dispersal system.

(4) Dispersal systems with two or more leach lines shall use a distribution box or other manifold system approved by the ALA to promote equal distribution throughout the dispersal field. Systems with greater than 500 feet of leachfield trench being dosed with septic tank effluent at one time shall be equipped with some form of pressure dosing.

(5) Dispersal systems on sloping ground (greater than 4% slope) shall be designed to prevent the premature failure of the lowest trench. Systems on sloping ground may use relief-line systems to avoid slope-related dispersal system failure.

(f) Pressure distribution systems shall have a minimum of three feet of continuous soil beneath the bottom of the dispersal system and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times, and shall meet the following minimum requirements:

(1) tanks, risers, and lids for all pump vaults shall be structurally sound, watertight and store wastes in a manner that will not create odors or vector attraction;

(2) pump systems used to move effluent from the septic tank to the dispersal system shall be equipped with alarms that notify the owner and qualified service provider (i.e. remote dial-out) in the event of pump failure. All pump systems shall, at a minimum, provide for storage during a 24-hour power outage or pump failure.

(3) all pressure distribution systems shall be issued an operation permit.

(g) Mound systems shall incorporate a minimum of 12 inches of clean sand or equivalent (e.g. ground glass) meeting criteria in Table 2 or Table 2 items 1,2, and 3 in addition to ASTM Standard C-33 sand placed on the original soil surface. All mounds shall have a minimum of two continuous feet of soil beneath the mound and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times. In addition, mound systems shall meet the following requirements:

(1) all mound systems shall have groundwater monitoring wells for evaluating system performance, with locations and construction detail as required by the PA; and

(2) all mound systems shall be maintained to minimize erosion, slumping, or damage to the soil cover;

(3) all mound systems shall be issued an operation permit.

(4) Soil moisture conditions during mound construction shall not be at levels when the soil will smear during construction.

(5) All trees within the mound design area boundary shall be cut to ground level and all vegetation in said boundary shall be removed by rake and/or mowing. Tree stumps shall be cut off at ground level rather than disturbing the native soil by removing them.

(6) The mound area shall be prepared by using a spring-loaded agricultural chisel plow and plowing parallel to land contour. Shallow hand spading the surface can be performed as acceptable alternative. Rototilling shall not be used as an acceptable substitute.

(7) Trucks, tractors and backhoes with rubber-tired or steel wheels shall be driven over the mound design boundary or immediately downslope of the mound.

(8) The fill material

(9) Fill material shall be placed in position with a track-type tractor or by hand and shall be compressed by track rolling. The top of all fill material be leveled to ½ inch by hand and sides shall be sloped no greater than 3:1.

Table 2: Required Mound Sand Filter Specifications		
1.	Max. Percolation	Min. Percolation
	16	90
2.	Maximum Percent soils smaller than 0.53 mm in diameter.	
	5%	
3.	Maximum Percent fragments over 2.0 mm. In diameter.	
	20%	
4.	Sieve Size	Dry Weight % Passing
	3/8	100
	4	90-100
	10	65-100
	16	50-85
	30	25-60
	50	10-30
	100	2-16
	200	0-7

(h) At-grade systems shall have a minimum of five continuous feet but no less than three feet of soil beneath the dispersal system and above high seasonal high groundwater, impervious layer of soil or rock, or fractured/weathered bedrock at all times, and shall have a minimum of 12 inches of soil cover over the dispersal system. The PA may allow a lesser

separation but not less than 3 feet from high seasonal high groundwater, impervious layer of soil or rock, or fractured/weathered bedrock, as allowed by the RWQCB. All at-grade systems shall be issued an operation permit.

(i) Evapotranspiration and absorption systems shall have a minimum of three continuous feet of soil beneath the dispersal system and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times and shall be designed such that evaporation and absorption exceed the design waste flow combined with a 25-yr return rate precipitation event on an annual and seasonal basis. Evaporation and absorption systems shall meet the following requirements:

- (1) no ponding shall occur beyond the perimeter of the systems.
- (2) no vectors shall be attributable to the systems; and
- (3) no nuisance odors shall be attributable to the systems.
- (4) all evapotranspiration and absorption systems shall be issued an operation permit.

(j) Gravel-less chambers shall meet all requirements for conventional dispersal systems contained in ¶(e). Gravel-less chamber systems shall meet the following minimum requirements:

(1) All gravel-less chamber system shall be designed and installed to distribute the wastewater in parallel or in relief line designs.

(2) The liquid storage capacity or the storage capacity of the gravel-less chamber system must be greater or equal to that available in a new conventional OWTS contained in ¶(e); and

(3) The structural integrity of the gravel-less chamber system shall be tested and shall conform to the performance requirements set forth in the International Association of Plumbing and Mechanical Officials (IAPMO) Material and Property Standard for Plastic Leaching Chambers IAPMO PS 63-2004. Performance testing per IAPMO PS 63-2004 shall be conducted by an organization that holds an up-to-date certification with IAPMO.

(k) Subsurface drip systems shall have a minimum of two continuous feet of soil beneath the dispersal system and above seasonal high groundwater, impervious layer, or fractured/weathered bedrock at all times. In addition, subsurface drip systems shall meet the following requirements:

- (1) all subsurface drip systems shall have a minimum of 6 inches of soil cover over the dispersal system;
- (2) all effluent dispersed in a subsurface drip system shall meet the performance requirements in §22912(b);
- (3) distribution lines shall be installed in “closed loop” networks and shall include flow control valves on the supply lines and return lines for periodic flushing;
- (4) pumps shall be sized to accommodate the expected discharge rate and the flow rate needed for line flushing;
- (5) all systems shall be maintained to reduce emitter biological growth plugging and root intrusion;
- (6) all distribution networks shall be equipped with a vacuum release valve to reduce the amount of soil particles entering effluent emitter orifices;
- (7) all system components shall be warranted by the manufacturer for use with domestic wastewater and for resistance to root intrusion;
- (8) system emitters shall not have a rated discharge in excess 1.3 gallons per hour. Emitter discharge rate may be controlled either by use of pressure-compensating emitters or with a pressure regulator; and
- (9) all system distribution lines shall be color-coded purple to identify that the line contains non-potable water from a sewage source.
- (10) All subsurface drip systems shall be issued an operation permit.

(l) Seepage pit installations shall be designed on sidewall area and allowed only where all of the following conditions apply:

(1) where one of the following conditions exists:

- (a) the site is served by a community water supply and has no domestic wells within 600 feet of the OWTS, or

- (b) the site is served by a community water supply and the site is within 600 feet of a domestic well and the new OWTS provides treatment that meets the performance requirements in §22912(b) prior to discharge into the seepage pit, or
- (c) the site meets the following:
 1. it is an existing parcel approved for OWTS at the time of lot creation;
 2. it has an onsite domestic well that is sealed at 20 feet below the depth of the bottom of the seepage pit; and
 3. the new OWTS provides treatment that meets the performance requirements in §22912(b) prior to discharge into the seepage pit.

(2) the site evaluation demonstrates to the satisfaction of the PA that a shallow dispersal system is unsuitable due to soil or spatial conditions; and

(3) the seepage pit design allows a minimum of ten feet of soil below the bottom of the seepage pit and above the seasonal high groundwater level, impervious layer, or fractured/weathered bedrock. The discharger shall demonstrate that all strata to a depth of 10 feet below the pit bottom are free of groundwater in accordance with §22955(d). The PA may allow a lesser depth of soil below the bottom of the seepage pit, but no less than two feet of soil, provided that the effluent meets the performance requirements for supplemental treatment in §22912(b).

(m) The PA may allow imported soil material for use in complying with depth of soil requirement for dispersal systems and supplemental treatment systems. Imported soil material must meet the minimum specifications in Table 2. Imported soil material shall be placed using the construction standards contained in §22914(g)(4) to §22914(g)(9). All systems with imported soil or equivalent shall use a supplemental treatment system meeting the requirements in §22912(b).

§22915. SWRCB -- Fats, Oils and Grease (Interceptors and Traps).

(a) Influent to a new OWTS shall not contain total fats, oils, or grease (FOG), alone or in combination, in excess of 90 mg/L.

(b) If the influent to the new OWTS exceeds or is anticipated to exceed a FOG concentration of 90 mg/L, a grease interceptor or grease trap shall be placed upstream of the OWTS. All grease interceptors shall have at least two access risers, one over the inlet and one over the outlet, with lids secured at finish grade (land surface elevation) for system inspection and maintenance. Grease interceptor systems shall be designed in accordance with Appendix H, Part 5, Title 24 of the California Code of Regulations. Grease interceptors shall be placed outside the facility.

(c) The PA shall require periodic inspections of grease interceptors and grease traps.

(d) Grease interceptors and grease traps shall be maintained to remove accumulated scum and sludge at frequencies necessary to ensure proper operation.

Authority Cited: CA Water Code § 13291. Reference: CA Water Code §

ARTICLE 5: PROTECTING IMPAIRED SURFACE WATER AND GROUNDWATER

§22940. SWRCB -- Provisions for Protecting Impaired Surface Water.

The following requirements apply to all OWTS within 600 feet of impaired surface water where OWTS have been identified by the RWQCB as contributing to the specific impairment of that surface water pursuant to Section 303(d) of the Clean Water Act.

(a) Where surface water is listed as impaired due to nitrogen and OWTS have been identified as contributing to the nitrogen impairment, the following shall apply:

(1) all permits issued after January 1, 2007, for new OWTS installations shall incorporate the performance requirements for supplemental treatment in §22912(b);

(2) all existing OWTS shall be upgraded or replaced by January 1, 2009, to meet the performance requirements of §22912(b)(1) unless a groundwater monitoring report prepared under the responsible charge of a California registered

professional engineer or California registered professional geologist approved by the PA demonstrates that the nitrogen from existing OWTS are not contributing to the impairment.

(3) all existing OWTS may be exempt from the requirements in §22940(a)(2) where the PA and RWQCB establish a greater or lesser distance than 600 feet based on a groundwater monitoring report. The groundwater monitoring report shall be prepared under the responsible charge of a California registered professional engineer or California registered professional geologist and shall demonstrate that the proposed distance is a more accurate estimate of OWTS impact on the impaired water body. In such cases, those OWTS identified by the RWQCB as contributing to the impaired water body shall meet the performance requirements of §22912(b).

(b) Where surface water is listed as impaired by the RWQCB due to pathogens and OWTS have been identified as contributing to the pathogen impairment, all the following shall apply:

(1) all permits issued after January 1, 2007, for new OWTS shall incorporate performance requirements for supplemental treatment in §22912(b)(1), §22912(b)(2) and §22912(c).

(2) all existing OWTS shall be upgraded or replaced by January 1, 2009, with OWTS that meet the performance requirements of §22912(b)(1), §22912(b)(2), and §22912(c) unless a groundwater monitoring report prepared under the responsible charge of a California registered professional engineer or California registered professional geologist and approved by the PA demonstrates that the pathogens from existing OWTS are not contributing to impairment.

(3) all existing OWTS may be exempt from the requirements in §22940(b)(2) where the PA and RWQCB establish a greater or lesser distance than 600 feet based on a groundwater monitoring report. The groundwater monitoring report shall be prepared under the responsible charge of a California registered professional engineer or California registered professional geologist and shall demonstrate that the proposed distance is a more accurate estimate of OWTS impact on the impaired water body. In such cases, those OWTS identified by the RWQCB as contributing to the impaired water body shall meet the performance requirements of §22912(b)(1) and §22912(b)(2).

(c) OWTS owners who commit by way of a legally binding document signed on or before January 31, 2009 to connect to a centralized community wastewater collection and treatment system by a specified date no later than December 31, 2015 are exempt from this Section.

(d) The compliance dates for existing OWTS in (a) and (b) may be extended as a part of an implementation schedule for a Total Maximum Daily Load (TMDL), adopted prior to January 31, 2009. In no event shall the compliance dates exceed December 31, 2015.

§22945. SWRCB -- Provisions for Protecting Impaired Groundwater

Where OWTS have been identified as causing or contributing to groundwater pollution or contamination, the ALA and RWQCB shall meet and confer to identify corrective actions and an implementation schedule. Actions for consideration shall include, but not be limited to the following:

- (a) increased OWTS oversight;
- (b) preparation of a cumulative impact analysis;
- (c) use of a centralized wastewater collection system;
- (d) enactment of a building moratorium in the area of the pollution or contamination; or
- (e) mandate for use of supplemental treatment for new and existing OWTS.

ARTICLE 6: RWQCB EXEMPTIONS AND AUTHORIZED LOCAL AGENCY (ALA) VARIANCES

§22946. SWRCB – General Variances

The PA may issue variances for the replacement dispersal field required pursuant to §22955(a)(4)(A), or new OWTS where such OWTS are designed to provide supplemental treatment pursuant to §22912 of this Chapter.

§22947. SWRCB -- RWQCB Procedure for Establishing Exemptions.

A RWQCB may amend its basin plan establishing criteria and procedures for exemptions from this Chapter, or portions thereof. All such exemptions shall not be less protective of water quality or human health within the particular location or area subject to the exemption than provided for in this Chapter.

Authority Cited: CA Water Code §13291, 13240, 1242, 13243.

§22948. SWRCB -- ALA Procedure for Establishing Variances.

An ALA may issue variances from this Chapter consistent with the exemptions established pursuant to §22947. Variances issued by the ALA for specific sites shall conform to all RWQCB exemption requirements.

Authority Cited: CA Water Code §13291.

ARTICLE 7. SITE EVALUATION**§22955. SWRCB -- Site Evaluation.**

(a) The site evaluation report as required in §22901(d) shall include the following:

- (1) street address (if applicable) of the OWTS site and assessor's parcel number;
- (2) name, address, and telephone number of the property owner and owner's agent (if applicable);
- (3) soils information as specified in ¶(b) and ¶(c) of this section;
- (4) plot map(s) including the following items, as applicable:
 - (A) scale or dimensions of the site with the OWTS and 100 % replacement field shown;
 - (B) North arrow (Magnetic North);
 - (C) property line corners and dimensions;
 - (D) setbacks required by local ordinance and regulations;
 - (E) ground slopes and direction;
 - (F) paved and unpaved routes for vehicular traffic;
 - (G) public and private easements;
 - (H) location of structures, including but not limited to dwellings, garages, out-buildings, swimming pools, patios and decks;
 - (I) location of water lines and utilities;
 - (J) delineation of areas known to be subject to flooding or seasonal inundation;
 - (K) location of known wells and surface water bodies within 600 feet of the proposed OWTS;
 - (L) location of any existing failed OWTS on the subject parcel, where applicable;
 - (M) proposed location of the OWTS ;
 - (N) location of trees within 10 feet of proposed dispersal area or as deemed appropriate by the PA;
 - (O) location of cutbanks or bluffs onsite within 100 feet of the OWTS;
 - (P) location of soil evaluation sites; and
 - (Q) a vicinity map, if required by the PA.
- (5) OWTS design identified in ¶(e) of this section.

(b) For the purposes of complying with the requirements in §22914, site soils in the dispersal area shall be determined through direct evaluation. The number and location of the evaluations shall be sufficient to adequately characterize soil conditions. Soils profile information shall be determined through direct observation using the following:

(1) the following factors shall be observed and reported from the ground surface to a limiting condition, up to a minimum of three feet below the bottom of the dispersal system using the methods contained in §(b)(2) below:

- (A) thickness and coloring of soil layers, soil structure, and texture according to United States Department of Agriculture (USDA) classification system, including identification of soil horizon classifications;
- (B) depth to a limiting condition such as hardpan, rock strata, impermeable soil layer or saturated soil conditions;
- (C) depth to observed groundwater if observed at levels at or within three feet of the limits specified for the proposed dispersal technology, as listed in §22914.
- (D) depth to a description of soil mottling; and
- (E) other prominent soil features which may affect site suitability such as coarse fragments, consistence, roots and pores and moisture content; and

(2) Soil conditions shall be determined by conducting a soil evaluation using either of the two practices:

(A) soil profile excavation in the area of the primary dispersal system (e.g., *Standard Practice for Subsurface Site Characterization of Test Pits for On-Site Septic Systems: ASTM 5921-96*); or

(B) augered test hole evaluations may be conducted (e.g., *Standard Practice for Soil Investigation and Sampling by Auger Borings ASTM 1452-80*) where the PA determines one of the following:

(A) the use of an excavation vehicle is impractical because of access limitations or soil conditions, including depth of proposed system; or

(B) testing is necessary only to verify conditions expected on the basis of prior soils investigations; or

(C) testing is done in conjunction with geologic investigations; and

(c) Site soils permeability in the dispersal area shall be determined through direct evaluation. The number and location of the evaluations shall be sufficient to adequately characterize soil permeability. Soil permeability shall be determined by one or more of the following methods:

(1) percolation tests shall be conducted using general industry standards (e.g. *Table 3-8, Design Manual: Onsite Wastewater Treatment and Disposal Systems, EPA 625/1-80-012, Office of Water Program Operations, Office of Research and Development, USEPA, 1980; Procedure for Percolation Tests Developed at Robert A. Taft Sanitary Engineering Center, p.4, Manual of Septic Tank Practice, Public Health Service Publication No. 526, U.S. Department of Health, Education, and Welfare, 1967; Recommendations for a Refined Percolation Test, Appendix, Guidelines for Mound Systems, State Water Resources Control Board, 1980*) or as determined by the PA.

(2) soil texture analysis for each soil horizon to the level of effective soil treatment shall be analyzed using standard practices for field texture evaluation (e.g., *Standard Test Method for Particle-Size Analysis of Soils ASTM D 422-63*).

(d) Unless the seasonal high groundwater level in the vicinity of the site is known to be greater than 10 to 15 feet below the ground surface (based on a local groundwater study), a site evaluation to determine the depth to the seasonal high groundwater shall be performed. The number and location of groundwater monitoring wells shall be sufficient to adequately characterize site soil conditions. Groundwater levels shall be determined using the following protocol prior to design and installation of an OWTS:

(1.) To measure depth to seasonal high groundwater, a groundwater level monitoring well shall be installed to a minimum depth of ten feet in the vicinity of proposed wastewater dispersal system. If an impermeable layer is present at depth of less than ten feet below the ground surface, the depth of the groundwater level monitoring well shall be decreased accordingly, as approved by the ALA and/or the RWQCB. For projects other than single family homes, the ALA and/or the RWQCB shall determine the number and depth of groundwater level monitoring wells.

(2.) Measurements of depth to seasonal high groundwater shall take place when the following occur:

(A.) a minimum of 80% of the average annual rainfall has fallen based on records of seasonal rainfall accumulations from the nearest weather stations. If a groundwater monitoring program demonstrates to the satisfaction of the PA that groundwater levels in its area of its jurisdiction are not subject to large seasonal variations, the percent of required rainfall prior to groundwater level measurements may be reduced appropriately. In no case shall the percentage of required rainfall be less than 60 percent of the average annual rainfall.

(B.) a minimum amount of rainfall equaling at least 10% of the average annual rainfall has occurred within 30 calendar days immediately preceding the date of a measurement.

(C.) the groundwater level shall be measured on a minimum of three separate days that meet the criteria established in (A) and (B).

(3.) For areas that are subject to special circumstances such as seasonal high groundwater caused by snowmelt or irrigation, the ALA shall propose a groundwater level monitoring program for the approval of the RWQCB.

(4.) saturated conditions caused by significant rain events that occur more than once during the evaluation of seasonal ground water levels shall provide one basis for determination of seasonal high groundwater.

(5.) Soil mottling observations may be used to determine the seasonal high groundwater level when such determinations can be made to the satisfaction of the ALA and RWQCB.

(e) An OWTS design shall include drawings, an O&M manual, calculations, and related technical information in sufficient detail to substantiate that the proposed OWTS conforms to the siting, design, and performance requirements contained in this Chapter as applicable and with any additional requirements of the PA.